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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,047	06/14/2001	Jun Kametani	Q64973	5937
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SUGHRUE, MION, ZINN, MACPEAK & SEAS		EXAMINER		
2100 Pennsylvania Avenue, N.W.		HABTE, ZEWDU		
Washington, DC 20037-3202				
		ART UNIT	PAPER NUMBER	
		2661		

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,047

Applicant(s)

KAMETANI, JUN

Examiner

Zewdu Habte

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 14, 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) **PHIRIN SAM**
PRIMARY EXAMINER
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. (US 6118784) in view of Curry et al. (US 6233234 B1).

As to Claim 1, Tsuchiya discloses a network system (Fig. 3, a communication network system) wherein an IP packet according to a service requested by a terminal (Fig. 3 @ 5, a terminal) is sent to ... through a plurality of IP networks (Fig. 3, IPv4 Network and IPv6 Network) different from each other in protocol (IPv4 and IPv6) and the service is supplied to the terminal through the utilization of an IP packet transmitted from ... to the plurality of IP networks, said network system comprising packet exchange means that is provided between the plurality of IP networks (Fig. 3 @ 1, IPv4 – IPv6 converting apparatus) and functions to convert the format of the IP packet, to be sent, so as to match the format of the IP network as a send destination (col. 5, lines 42-50, converting apparatus 1a converts packets that receives between the two networks according to the network's packet format). Tsuchiya does not teach a service provider, but Curry teaches a service provider (Fig. 1 @ 58, ISPs). It would have been obvious to one of ordinary skill in the art to combine Tsuchiya with Curry for the purpose of having a service provider to provide an access to a different network. The motivation is to

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establish an access to a provider to a core group of Internet utilities and services like E-mail, News groups etc....

As to claim 2, Tsuchiya discloses the network system according to claim 1, wherein the plurality of IP networks (Fig. 3, IPv4 Network and IPv6 Network) include a first IP network which the terminal accesses (Fig. 3 @ 5, IPv6) and a second IP network (Fig. 3 @ 2, IPv4) which ... accesses. Tsuchiya does not teach a service provider, but Curry teaches a service provider (Fig. 1 @ 58, ISPs). It would have been obvious to one of ordinary skill in the art to combine Tsuchiya with Curry for the purpose of having a service provider to provide an access to a different network. The motivation is to establish an access to a provider to a core group of Internet utilities and services like E-mail, News groups etc....

As to claim 6, Tsuchiya discloses the network system according to claim 1, wherein the packet exchange means (Fig. 3 @ 1, IPv4 – IPv6 converting apparatus) measures the transfer amount of the IP packet of which the format has been converted (col. 8, lines 18-41, extract IPv4 address and mapped IPv6 address of 128 bit).

As to claim 7, Tsuchiya did not disclose the network system according to claim 2, wherein the terminal is connected to the first IP network through an access gateway which authenticates the IP packet, but Curry teaches an access gateway (Fig. 1 @ 66, col. 18, lines 26-38, access gateway comprises ...databases; ...databases include look-up tables for authentication of and/or translation of names or numbers). It would have been obvious to one of ordinary skill in the art to combine Tsuchiya with Curry for the

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purpose of having an access gateway. The motivation is to establish a selectable security through an access gateway to a terminal.

Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya and Curry as applied to claim 1 above, and further in view of Kung et al. (US 6775267 B1).

As to claim 3, neither Tsuchiya nor Curry discloses a first server which stores services provided by the service provider but, Kung discloses a server (Fig. 2 @ 240, accounting gateway; col. 16, lines 18-40, accounting gateway accommodates multiple accounting records). It would have been obvious to one of ordinary skill in the art to combine Tsuchiya and Curry with Kung for the purpose of having a server in order to store information regarding a service provided to a client. The motivation is to construct a detail record for a specific time period.

As to claim 5, neither Tsuchiya nor Curry discloses the network system according to claim 3, wherein the first server stores the format of the plurality of IP networks and the address of the service provider, but Kung discloses a server (Fig. 2 @ 240, server which could be programmed to store any information regarding the service provided to a customer). It would have been obvious to one of ordinary skill in the art to combine Tsuchiya and Curry with Kung for the purpose of having a server in order to store information regarding a service provider. The motivation is to provide an address lookup table according to the format of the service provider.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya and Curry as applied to claim 1 above, and further in view of Buhler et al. (6104704).

As to claim 4, neither Tsuchiya nor Curry discloses a second server which stores account information of the service which has been provided to the terminal, but Buhler discloses a billing server (Fig. 3 @ 62, billing server; claim 1, col. 7, lines 8 and 9, billing record database stores billing information relating to an internet connections). It would have been obvious to one of ordinary skill in the art to combine Tsuchiya and Curry with Buhler for the purpose of having a billing server in order to store billing information regarding a service provided to a client. The motivation is to construct a billing detail record for a specific time period.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry in view of Kung (US 6775267 B1).

As to claim 8 Curry discloses a network system (Fig. 1) comprising: a user terminal (Fig.1 @10, business establishment) to be utilized by a user; a plurality of networks of service providers or online entrepreneurs (Fig.1 @ 58, ISPs) which provide various services to the user (col. 14, lines 55-57, ...one or more ISP gateways is connected from an Internet router to one or more central offices); an IP network (Fig. 1 @ 48, data network or Internet) which performs the transmission of packet data between the user terminal and the plurality of networks through a router according to an IP address (col. 14, lines 58-62, calls through the network to and from such gateways...; col. 15, lines 34- 51, Internet 48, utilize IP protocol addressing...). Curry does not disclose servers, but Kung discloses servers connected to the IP network (Fig. 2 @

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255,212,214,..., servers connected to the IP network 120), said servers functioning to record information about the user, information about the plurality of service providers or online entrepreneurs, and information about services provided from the side of the plurality of networks to the user, and, based on the record, to unitarily manage account information of the service provided to the user, and to perform alternative account billing from the service providers or online entrepreneurs to the user (implicitly taught because in a network, servers provide information according to how they are programmed; a server could be programmed to a specific task). It would have been obvious to one of ordinary skill in the art to combine Curry with Kung for the purpose of having a plurality of servers in the network. The motivation is to provide the necessary intelligence and traffic management capabilities to enable information in and out of the network.

As to claim 9, Curry did not specifically disclose the network system described in this claim, but Kung discloses a packet exchange connected to the IP network (Fig. 2 @ 200, gateways), said packet exchange functioning to convert packet data from the user terminal to the protocol and format of a send destination network within the plurality of networks, and to convert packet data from one of the plurality of networks to the protocol and format of the user terminal (col. 13, lines 45-55, the gateways in the IP central station 200 may be configured to provide translation of signals to and/or from the various servers in the IP central station 200, the IP network 120, the public switched telephone network 160, the signaling system 7 network 170, the Internet 180, and/or the secured management data network 190). It would have been obvious to one of ordinary skill in the art to combine Curry with Kung for the purpose of having a packet exchange

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connected in the network. The motivation is to provide communication between different service providers with different protocol formatting.

As to claim 10, Curry did not specifically disclose the network system described in this claim, but Kung discloses the packet exchange performs the conversion of the packet data using MPLS (multi-protocol label switching protocol) or IP within IP (col. 37, lines 4-6, the optimized routing algorithm associated with a network server for each network service provider can define homogeneous network routing, IP-IP). It would have been obvious to one of ordinary skill in the art to combine Curry with Kung for the purpose of having a packet exchange conversion data using IP within IP. The motivation is to provide server-controlled, least-cost routing.

As to claim 11, Curry discloses the network system according to claim 8, wherein the user terminal is a personal computer or a portable terminal having the function of processing packet data (col. 14, lines 58-62, ...calls through the network to and from such gateways typically bypass long distance inter-exchange carriers and may utilize a data network connection to a PC at one end of the call, as in the example of the PCs in the business establishment 10).

As to claim 12 Curry discloses a network system (Fig. 1) comprising: an IP network (Fig. 1 @ 48, data network or Internet) through which an IP packet is transmitted (col. 14, lines 58-62, calls through the network to and from such gateways...); an access gateway connected to the IP network (Fig. 1 @ 66, access gateway); a user terminal which is installed on a user side and is connected to the access gateway (Fig. 1 @ 10, business establishment)...; and a plurality of border

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gateways (Fig. 1 @ 58, Gateways) which connect the packet exchange to the plurality of networks of the service providers or online entrepreneurs (col. 14, lines 55-58, ...one or more ISP gateway 58...). Curry does not disclose servers, but Kung discloses servers which are connected to the IP network (Fig. 2 @ 255, 212, 214, ..., servers connected to the IP network 120) and function to record information about the user and the plurality of service providers or online entrepreneurs, and information about services provided from the plurality of service providers or online entrepreneurs to the user, and, based on the record, to unitarily manage account information of the service provided to the user (implicitly taught because in a network, servers provide information according to how they are programmed; a server could be programmed to a specific task); a packet exchange (Fig. 2, gateways) which is connected to the IP network, converts received packet data to the format and protocol of the network of a service provider or an online entrepreneur as a send destination, and sends the converted packet data (col. 6, lines 20-23, ...appropriate transport protocol may be utilized). It would have been obvious to one of ordinary skill in the art to combine Curry with Kung for the purpose of having a plurality of servers and a packet exchange router in the network. The motivation is to provide the necessary intelligence and traffic management capabilities to enable information in and out of the network, and to provide communication between different service providers with different protocol formats.

As to claim 13 Curry discloses the network system according to claim 12, wherein the user terminal (Fig. 1 @ 10, business establishment) is a personal computer or a portable terminal having the function of processing packet data (col. 13, lines 56-

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67, ... PCs or work stations 44...), and the access gateway is a remote access server (col. 14, lines 58-62, ...calls through the network to and from such gateways typically bypass long distance inter-exchange carriers and may utilize a data network connection to a PC at one end of the call, as in the example of the PCs in the business establishment 10).

As to claim 15 Curry discloses the network system according to claim 12, wherein the user terminal and the packet exchange each are a router (it is inherent because in order to connect a layer three network such as IP network 48, you need a router).

As to claim 16 Curry does not disclose a packet exchange, but Kung discloses a packet exchange and the packet exchange is an exchange router (Fig. 2, gateways). It would have been obvious to one of ordinary skill in the art to combine Curry with Kung for the purpose of having a packet exchange router in the network. The motivation is to provide communication between different service providers with different protocol formats in a layer three environment.

As to claim 17, Curry did not specifically disclose the network system described in this claim, but Kung discloses the network system according to claim 12, 15 or 16, wherein the packet exchange performs the conversion of the received packet to the format and the protocol of the network of the send destination through the encapsulation of the format of the original IP packet by MPLS (multi-protocol label switching protocol) or IP within IP (col. 37, lines 4-6, the optimized routing algorithm associated with a network server for each network service provider can define homogeneous network

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routing, IP-IP). It would have been obvious to one of ordinary skill in the art to combine Curry with Kung for the purpose of having a packet exchange conversion data using IP within IP. The motivation is to provide server-controlled, least-cost routing.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curry in view of Hoke et al. (US 6701437 B1).

As to claim 19 Curry discloses a packet data transmission method (abstract lines 1-2, method for providing telephony communication through a packet switched data network ...) wherein packet data transmission for receive/send of services between a user terminal (Fig.1 @10, business establishment) and a plurality of service providers or online entrepreneurs (Fig.1 @ 58, ISPs) is carried out using Curry does not disclose a VPN, but Hoke discloses VPN (abstract lines 7-11, virtual private network...) said packet data transmission method comprising the steps of: recording, in servers, information about users, who utilize the user terminal, and the plurality of service providers or online entrepreneurs (col. 8, lines 37-39, VPN units maintain lookup tables for identifying members of specific virtual networks...); upon the receipt of a request from the user for a service, only when information about packet data from the user terminal matches access conditions recorded in the servers (col. 8, lines 37-39, VPN units maintain lookup tables for identifying members of specific virtual networks...), converting the packet data from the user to the protocol and format of the network of a service provider or an online entrepreneur as a send destination by a packet exchange, and sending the converted packet data to a network corresponding to the designated one of the plurality of service providers or online entrepreneurs (col. 6, lines 19-26, ...

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virtual private network may adhere to any of a wide variety of network protocols,...); for packet data from the plurality of service providers or online entrepreneurs, converting the packet data to the protocol and format of the network on the user terminal side by the packet exchange, and sending the converted packet data to the user terminal (col. 6, lines 19-26, ... virtual private network may adhere to any of a wide variety of network protocols,...; col. 6, lines 41-47, ... VPN units 145 and 155 are implemented as software modules within remote clients 140 and 150); and storing and managing account information about the services to the user and executing alternative account billing to the user by the servers (implicitly taught because in a network, servers provide information according to how they are programmed; a server could be programmed to a specific task). It would have been obvious to one of ordinary skill in the art to combine Curry with Hoke for the purpose of having a virtual private network. The motivation is to provide a selective processing for secure communications among members of a virtual private network.

Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Curry and Hoke as applied to claim 19 above, and further in view of Kung.

As to claim 20 neither Curry nor Hoke disclose specifically disclose the network system described in this claim, but Kung discloses the conversion of packet data by the packet exchange is carried out using MPLS (multi-protocol label switching protocol) or IP within IP (col. 37, lines 4-6, the optimized routing algorithm associated with a network server for each network service provider can define homogeneous network routing, IP-IP). It would have been obvious to one of ordinary skill in the art to combine Curry and

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Hoke with Kung for the purpose of having a packet exchange conversion data using IP within IP. The motivation is to provide server-controlled, least-cost routing.

Allowable Subject Matter

Claims 14 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zewdu Habte whose telephone number is 571-272-3115. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ZH

Zewdu Habte (Zed)

December 6, 2004

A handwritten signature in black ink, appearing to read "Phirin Sam", with a large, stylized initial "P" and a long, sweeping horizontal stroke at the end.

PHIRIN SAM
PRIMARY EXAMINER